

I Claim:

1. A process for forming a medical device, comprising:
 - (a) forming and adhering a layer of material to a previously formed layer or to a substrate;
 - (b) repeating the forming and adhering operation of (a) a plurality of times to build up a three-dimensional structure from a plurality of adhered layers;

wherein the formation of at least a plurality of layers, comprises:

 - (1) obtaining a selective pattern of deposition of at least a first material having voids, comprising at least one of:
 - (a) selectively depositing at least a first material onto a substrate or previously formed layer such that voids remain; or
 - (b) depositing at least a first material onto a substrate or previously formed layer and selectively etching the deposit of the first material to form voids therein; and
 - (2) depositing at least a second material into the voids
 - (c) after formation of a plurality of layers, removing at least one of the at least one first material or at least one second material to release the structure,

wherein the structure comprises a medical device.
2. A stent with expansion capability provided by structural elements that transition from an orientation having a radial component to an orientation having less of a radial component.
3. A stent capable of being at least partially bifurcated so that a first portion may extend along a first vessel and a second portion may extend along a second vessel and where a common portion extends along a vessel that joins the first and second vessels.
4. A stent having struts and wherein at least a portion of the struts have pockets located therein with passages that extend from the pockets to a region outside the stent.
5. A monolithically formed retriever comprising a housing and a shaft moveable relative to the housing and comprising fingers that can be opened or closed by the relative movement of the shaft and the housing.